

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Clarence T. Tegreene  
Application No. : To Be Assigned  
Filed : March 31, 2004  
For : **MOTE NETWORKS HAVING DIRECTIONAL ANTENNAS**

Examiner : To Be Assigned  
Art Unit : To Be Assigned  
Docket No. : 0104-003-006-000000  
Date : March 31, 2004

Mail Stop Patent Application  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(d), Applicant brings to the attention of the Examiner the documents listed on the attached PTO-1449 (substitute form). Applicant respectfully requests that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. Pursuant to 37 CFR 1.98(a)(2), copies of the foreign patent documents and non-patent literature are attached.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If it should be determined that any of the listed documents do not constitute "prior art" under United States law, Applicant reserves the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

Respectfully submitted,  
Clarence T. Tegreene

Date R. Cook  
Registration No. 42,434

DRC:tlm

Enclosures:

Check  
Postcard  
Certificate of Mailing by Express Mail  
New Utility Patent Application Transmittal (+ copy)  
Specification (33 pages)  
18 Sheets of Drawings (Figs. 1-18)  
Declaration and Power of Attorney  
Information Disclosure Statement  
Assignment Recordation Cover Sheet & Assignment  
Form PTO-1449 (Subst.) and copies of 17 cited references

Searete LLC  
1422 – 130<sup>th</sup> Ave. N.E.  
Bellevue, WA 98005  
(425) 467-2262  
(425) 467-2350 Facsimile

V:\Patent Legal\A-PATENTS FILED\Data Architecture Apps\0104-003-006-Mote Networks Having Directional  
Antennas\IDS - new app.doc

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Application Number</b>	<b>To be Assigned</b>
		<b>Filing Date</b>	March 31, 2004
		<b>First Named Inventor</b>	Clarence T. Tegreene
		<b>Group Art Unit</b>	<b>To be Assigned</b>
		<b>Examiner Name</b>	<b>To be Assigned</b>
Page 1 of 2		<b>Attorney Docket Number</b>	0104-003-006-000000

U.S. PATENT DOCUMENTS				
Examiner Initials	Cite No.	U.S. Patent Number	Name of Patentee	Date of Publication (MM-DD-YYYY)
	AA	2004/0005889 A1	Nishimura, et al.	01-08-2004
	AB	2003/0236866 A1	John J. Light	12-25-2003
	AC	2003/0172221 A1	Donald H. McNeil	09-11-2003
	AD	2002/0040639 A1	Duddleson, et al.	04-11-2002

FOREIGN PATENT DOCUMENTS				
Examiner Initials	Cite No.	Document Number	Country	Date of Publication (MM-DD-YYY)
	AE			English Translation Provided?

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	AF	BUONADONNA, PHILLIP; HILL, JASON; CULLER, DAVID; "Active Message Communication for Tiny Networked Sensors," pp. 1-11, printed on 03/08/2004.
	AG	GAY, DAVID; LEVIS, PHIL; VON BEHREN; WELSH, MATT; BREWER, ERIC; and CULLER, DAVID, "The nesCLanguage: A Holistic Approach to Network Embedded Systems," pp. 1-10; Intel Research Berkeley, The Intel Corporation, November 2002.
	AH	HILL, JASON; SZEWCZYK, ROBERT; WOO, ALEC; HOLLAR, SETH; CULLER, DAVID; PISTER, KRISTOFER, "System Architecture Directions for Networked Sensors," ASPLOS 2000, Cambridge, November 2000.
	AI	INTEL.COM, "Exploratory Research Deep Networking" pp. 1-10 located at <a href="http://www.intel.com/research/exploratory/heterogeneous.htm">http://www.intel.com/research/exploratory/heterogeneous.htm</a> , printed on 03/25/04.
	AJ	LEVIS, PHILIP, "Viral Code Propagation in Wireless Sensor Networks," EECS Department, University of California at Berkeley, printed on 03/08/2004.
	AK	LISCANO, RAMIRO, "Service Discovery in Sensor Networks: An Overview" Powerpoint Presentation; pp.1-51; School of Information Technology and Engineering, University of Ottawa, Ottawa, CANADA, bearing a date of 2003, printed on 03/08/2004.
	AL	MADDEN, SAMUEL, "Acquisitional Query Processing in TinyDB" Powerpoint Presentation, pp. 1-51; NEST Winter Retreat 2003, printed on 03/08/2004.
	AM	MADDEN, SAMUEL, "Challenges in Sensor Network Query Processing" Powerpoint Presentation at the January 15, 2002 NEST Retreat, printed on 03/08/2004.

Examiner Signature		Date Considered
--------------------	--	-----------------

OMB 0651-0031

V:\Patent Legal\A-PATENTS FILED\Data Architecture Apps\0104-003-006-Mote Networks Having Directional Antennas\PTO-1449  
new app.doc

INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	To be Assigned
		Filing Date	March 31, 2004
		First Named Inventor	Clarence T. Tegreene
		Group Art Unit	To be Assigned
		Examiner Name	To be Assigned
Page 2 of 2		Attorney Docket Number	0104-003-006-000000

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	AN	MADDEN, SAMUEL; SZEWCZYK, R.; FRANKLIN, MICHAEL; and CULLER, DAVID "Supporting Aggregate Queries Over Ad-Hoc Wireless Sensor Networks," pp. 1-10, printed on 03/08/04.
	AO	MADDEN, SAMUEL; SZEWCZYK, R.; FRANKLIN, MICHAEL; CULLER, DAVID "Supporting Aggregate Queries Over Ad-Hoc Wireless Sensor Networks" Powerpoint Presentation, pp. 1-47, 4 <sup>th</sup> IEEE Workshop on Mobile Computing, dated June 21, 2002.
	AP	MADDEN, SAMUEL; FRANKLIN, MICHAEL J.; HELLERSTEIN, JOSEPH; M., and HONG, WEI, "The Design of an Acquisitional Query Processor for Sensor Networks," pp. 1-14, SIGMOD, June 2003.
	AQ	RYER, ALEX; <a href="http://www.intl-light.com/handbook">Light Measurement Handbook</a> , <a href="http://www.intl-light.com/handbook">http://www.intl-light.com/handbook</a> ; pp. 1-64, copyright 1997, printed on 03/08/2004
	AR	SEARCHMOBILECOMPUTING.COM, "Ad-Hoc Network" pp. 1-3 located at <a href="http://searchmobilecomputing.techtarget.com/sDefinition/0,,sid40_gci213462,00.html">http://searchmobilecomputing.techtarget.com/sDefinition/0,,sid40_gci213462,00.html</a> , bearing a date of April 11, 2003, printed on 03/08/2004.
	AS	SEARCHNETWORKING.COM DEFINITIONS, "Jini" pp. 1-3 located at <a href="http://searchnetworking.techtarget.com/sDefinition/0,,sid7_gci212422,00.html">http://searchnetworking.techtarget.com/sDefinition/0,,sid7_gci212422,00.html</a> , bearing a date of April 10, 2003, printed on 03/08/2004.
	AT	SPYROPOULOS, AKIS; RAGHAVENDRA, C.S., "Energy Efficient Communications in Ad Hoc Networks Using Directional Antennas," Dept. of Electrical Engineering-Systems, University of Southern California, bearing a date of 2002, printed on 02/23/2004.
	AU	VISWANATH, KUMAR, "Adaptive, Integrated Multicast Routing for Group Communications in Ad-Hoc Networks" Powerpoint Presentation, pp. 1-12; Computer Engineering Department, University of California, Santa Cruz, printed on 03/08/2004.
	AV	WOO, ALEC; TONG, TERENCE; and CULLER, DAVID, "Taming the Underlying Challenges of Reliable Multihop Routing in Sensor Networks," pp. 1-14, SenSys '03, November 5-7, 2003, Los Angeles, California, USA.
	AW	
	AX	
	AY	
	AZ	
	BA	
	BB	
	BC	
	BD	

Examiner Signature	Date Considered
--------------------	-----------------